

REMARKS

Election

Examiner Christopher T. Sukhaphadhana called Mr. Michael A. Bernadicou on October 28, 2003 to require a restriction of distinct inventions under 35 U.S.C. § 121. During the telephone conversation, Applicants made a provisional election with traverse.

Applicants hereby affirm the election, with traverse, to prosecute the invention of Group I, claims 1-11, drawn to a structure, classified in class 257, subclass 48/620.

Applicants also hereby affirm the withdrawal, with traverse, of the invention of Group II, claims 12-13, drawn to a method of measuring critical dimensions, classified in class 716, subclass 21.

Applicants further hereby affirm the withdrawal, with traverse, of the invention of Group III, claims 14-16, drawn to a method, classified in class 382, subclass 209.

No amendment of the inventorship under 37 C.F.R. § 1.48(b) is required as a result of the above election.

Claim Rejections 35 U.S.C. § 103 (a)

The Examiner has rejected claims 1-11 under 35 U.S.C. §103 (a) as being unpatentable over Satya et al. (US 6,528,818, hereinafter Satya et al.) in view of Gallarda et al. (US 6,539,106, hereinafter Gallarda et al.).

Applicants respectfully disagree with the Examiner. As claimed in claim 1 of Applicants' claimed invention, the structure (250) includes a first set (245) of features located in the scribeline, the first set of features being a subset of product features; and a second set (255) of features located adjacent to the first set of features, the second set occupying a smaller area than the first set, the second set being similar to the first set, the second set being distinguishable from surrounding structures. See Figure 3 and lines 10-15 on page 8, as well as lines 12-17 on page 5 of the specification. Also, see Figure 1B and lines 20-21 on page 6 of the specification.

In contrast, the Satya et al. reference cited by the Examiner teaches a structure that is located within a test die (204). See Figure 4B. Also, see Col. 10, lines 61-64. Thus, the structure of Satya et al. is not located in a scribeline between two die, as claimed in claim 1 of applicant's claimed invention.

The Examiner states that Satya et al. further teaches that each test die (204) is configured to have a number of portions, namely, a first portion (206) and a second portion (208) separated by an intermediate portion (210). See Figure 4C. Also, see Col. 11, lines 38-44. The Examiner concedes that Satya et al. does not specifically mention or describe the second set of features occupying a smaller area than the first set. See the fourth paragraph near the middle of page 4 of the Office Action mailed November 6, 2003. However, in the opinion of the Examiner, Gallarda et al. describes the second set (536) of features occupying a smaller area than the first set (526, 528, 530, 532, 534). See Figure 5. See the fifth paragraph on page 4 of the Office Action mailed November 6, 2003.

Applicants submit that the Examiner has mischaracterized the cited reference of Gallarda et al. Gallarda et al. teaches that image 410 is a reference image taken of a first die while image 420 is a test image taken of a second die, where the reference image (410) and the test image (420) occupy areas having the same size. See Figure 4. Also, see Col. 6, lines 41-43. Thus, the structure of Gallarda et al. is also not located in a scribeline between two die, as claimed in claim 1 of applicant's claimed invention.

Gallarda et al. further teaches that since the reference image and the test image occupy areas having the same size, they may be aligned to match the features from the two images, thus identifying those features that have no counterparts. In particular, Gallarda et al. clearly describes the first set, or reference image (510), as including five features (512, 514, 516, 518, 520) and the second set, or test image (524), as including six features (526, 528, 530, 532, 534, 536), where the features from the two images are contact holes having the same pitch and the same critical dimension. See Figure 5. Also, see Col. 6, lines 54-58.

Thus, neither Satya et al. nor Gallarda et al. teaches, suggests, or renders obvious the structure of Applicants' claimed invention, as claimed in claim 1. Consequently, Applicants' claimed invention, as claimed in claim 1, would not have been obvious to one of ordinary skill in the art of semiconductors at the time that the invention was made.

Claims 2-11 are dependent on claim 1. Thus, Applicants' claimed invention, as claimed in claims 2-11, would also not have been obvious to one of ordinary skill in the art of semiconductors at the time that the invention was made.

In view of the foregoing, Applicants respectfully request the Examiner to withdraw the rejections to claims 1-11 under 35 U.S.C. §103 (a).

Applicant believes that all claims pending, including claims 1-11, are now in condition for allowance so such action is earnestly solicited at the earliest possible date.